

## WHAT IS THE TIP?

At the most basic level, the Transportation Improvement Program (TIP) is simply a list of transportation projects that the State of Rhode Island intends to implement using federal highway and transit funds. Federal regulations require that states and metropolitan areas undertake an extensive public planning process resulting in an eligible project list, the TIP, as a prerequisite for receipt of federal highway and transit funds. No highway or transit project can utilize federal funds unless it appears in an approved TIP. The Rhode Island TIP serves as the Rhode Island and the Providence-Pawtucket Metropolitan Area eligible project list for receipt of federal highway and transit funds.

In Rhode Island, the TIP is much more than a simple list of projects; it is the culmination of an extensive public outreach process to all communities, public interest groups and citizens throughout the state by the agencies involved in transportation planning and project implementation. Since Rhode Island is heavily dependent on federal transportation funding for improving and maintaining its transportation infrastructure, the TIP is vitally important to every citizen of the state. Given Rhode Island's reliance on federal funding for transportation projects, it is safe to say that if a project doesn't appear in the TIP, chances are, that project will not be implemented.

For state agencies charged with maintaining and operating the state's transportation facilities and equipment, RIDOT and RIPTA, the TIP is of utmost importance. Because of Rhode Island's dependence on federal funds, the TIP serves as a work program for those agencies in many respects establishing priorities for planning, design and project implementation.

In earlier years the TIP was considered merely a highway project list; this is no longer true. Although federal highway funds still comprise the largest source of funding in the TIP, Rhode Island has chosen to use the flexibility provided by federal laws to promote other transportation modes and enhance the environment. The TIP now includes a significant Bicycle/Pedestrian program as well as environmental projects and many projects designed to enhance the state and communities in which we live.

While the TIP is financial in nature (e.g., it establishes program and project cost estimates) it does not, in itself, provide any funding for project implementation, and is not a *budget* document. The annual State Capital Budget allocates funds and establishes expenditure authority that state agencies need to implement the TIP's projects. Another distinction between the state's Capital Budget and the TIP is the way funding is shown in each document. The TIP lists funding required at the time of project authorization by federal fiscal year (October 1- September 30). The state Capital Budget shows the funding needed to *pay expenditures* for the projects on a state fiscal year basis (July 1 - June 30). This can vary significantly from the funding shown in the TIP, since most TIP projects are multi-year in nature.

## NATIONAL TRANSPORTATION POLICY

The National Transportation Policy has particular importance to the State of Rhode Island since federal funding amounts to about 80% of the funding available to implement TIP projects. The Transportation Equity Act for the 21st Century (TEA 21), the federal legislation under which the state receives funding for its highway and transit programs, envisions a transportation system that has broad purposes. National policy focuses on making strategic transportation investments to improve the efficiency of the transportation system, to foster a robust economy, to enhance the environment, and to provide equity.

TEA 21 continues the major policies of the previous six-year act ("ISTEA"), which were to provide the foundation for the Nation to compete in the global economy, to develop a system that is economically efficient, to promote economic development, and to contribute to increased productivity growth.

The current funding act expires at the end of fiscal year 2003. A new act, known as "TEA-3", will be reauthorized by Congress for the next six years. Due to the uncertainty of funding available to Rhode Island in 2004, reasonable assumptions have been made for the purpose of producing a two-year fiscally constrained TIP.

Another important national policy is to develop a transportation system that is environmentally sound and "will move people and goods in an energy efficient manner," reducing energy consumption and air pollution. Significant improvements in public transportation are said to be necessary.

Other policies emphasized in federal legislation and regulations are:

- to create an interconnected transportation system, which includes all forms of transportation and provides for intermodal transfer;
- to seek innovation and new technology;
- to consider social benefits and "quality of life";
- to involve the public in decision making; and
- to develop a program that is realistic given the amount of funding expected to be available.

## POLICIES AND THEMES OF RHODE ISLAND'S TIP

Guided by the Governor's policies of *"Fixing-it-First"* and making strategic economic investments with transportation funds, Rhode Island has embraced these overarching policies of TEA21. These larger purposes have been incorporated into the process which developed Rhode Island's new TIP and are evident in the result.

The State Planning Council's Transportation Advisory Committee (TAC) is charged with recommending a draft TIP. The TAC made a thorough evaluation of proposed projects, using five broad groups of criteria established by the State Planning Council:

- mobility benefits,
- cost-effectiveness,
- economic development impact,
- environmental impact, and
- degree of support to local and state goals and plans.

The following themes can be seen in the resulting program:

### *Benefit/cost & "Fix It First":*

A priority theme was to *"fix it first"*. Preventive maintenance is far more cost effective than reconstruction of facilities that have not been maintained. The TAC favored projects that promise maximum benefits for a modest cost. An example is expansion of the Pavement Management program. This program includes projects suggested by RIDOT and communities that should need relatively minor improvements along with resurfacing to qualify for federal funding assistance. Similarly, the Bridge Program received significant funding, reflecting a recognition of the need to maintain existing infrastructure. It should be noted that neither category has sufficient funds to address all of the needs.

### *Economic development:*

The TIP also emphasizes projects that support economic development; are important for the regional economy; and can contribute to creating jobs, including the tourism sector. The Quonset Access Road, the I-195 relocation in Providence, East Main Road in Middletown, and improvements to RI-5 in Warwick are examples. Also, the bridge and Interstate reconstruction programs received large shares of funding, because of the need to maintain Rhode Island's infrastructure for economic development.

*Urban redevelopment:*

Another factor in the TAC's priority-setting was the potential to make improvements in poorer, older neighborhoods, particularly where there are ongoing redevelopment efforts and the projects will have economic benefits. A few "Main Street" projects appear in the TIP. These projects reduce congestion, link different modes, are cost-effective, preserve existing infrastructure, can be leveraged with other funding, encourage tourism, enhance historic districts, improve visual appeal, retain community and quality-of-life values, strengthen urban areas as opposed to encourage sprawl, and support local goals and plans. This potential was apparent in several Enhancement projects, including the Woonsocket River Landing and Westminster Street Revitalization in Providence.

*Intermodal system:*

As in ISTEA, intermodal linkage was another highlight. Many TIP projects have intermodal features. Examples are the T.F. Green/Warwick Station Intermodal Facility and Phase 3 of the South County Bike Path which connects to Kingston Station. Most of the Congestion Mitigation and Air Quality (CMAQ) projects also are intermodal in nature.

The TIP as a whole is multi-modal. It has a highway program (encompassing bicycle/pedestrian and carpool projects), a transit program (including buses, commuter trains and ferry service) and (for informational purposes) an airport improvement program

*Environmental benefits:*

Environmental benefits are reflected mainly in the CMAQ, Enhancements, transit, and bicycle/pedestrian programs, which received much attention from the TAC and other committees. Projects were selected that have potential to improve the environment, including air quality, water quality, and scenic and historic values. The bicycle program concentrates on projects that can proceed to construction soon and that contribute to completion of the East Coast Greenway and statewide bikeway systems.

*Cost reduction:*

A constant concern was reducing costs by scaling back projects, wherever possible. The Pavement Management program suggests projects to RIDOT that should need relatively minor improvements along with resurfacing to qualify for federal funding assistance.

*Financially realistic programming:*

Cost-effectiveness was an objective in itself, but the Council and the TAC also took seriously the need to make the whole program financially realistic. Federal funding estimates were used as a control total, and efforts were made to fit in as many projects as possible. Difficult decisions had to be made, and a balance reached among categories such as Interstate, bridge, other highway, Enhancement, and the remaining types of projects. With this emphasis on preserving and managing existing infrastructure and reducing costs, the TIP contains few new-construction projects. Two large, multi-year projects (Quonset Access Road [new capacity] and I-195 relocation [reconstruction]) are continued, and the Washington Bridge has been added starting in 2004. The large projects are consuming an increasingly larger share of highway and bridge funds available, and the future funding needed for these three projects and the remainder of the system is a serious issue that requires immediate attention.

*Public involvement:*

In developing Rhode Island's TIP, the participation of local officials and the public is the cornerstone of the process.

The State Planning Council, which includes local and public members, re-adopted criteria for project evaluation. in 2001. The Council discussed the draft TIP at numerous meetings throughout 2002.

The TAC is a diverse committee of 26 members. It discussed the TIP at length during monthly meetings in 2001 and 2002.

Local officials were sent letters in November and December, 2001 explaining the TIP and soliciting project proposals and priorities. Four informational workshops for local officials and the public were held in January, 2002.

The public received notice of the opportunity to submit proposals via mailings and newspaper advertisements. The TAC held four public hearings around the state in February, 2002 to receive proposals. Over 170 proposals were submitted by 36 of the 39 cities and towns, 5 state agencies, 1 regional agency, 1 citizen, 1 private entity, and 1 non-governmental organization.

Projects were reviewed by the TAC during March and April, 2002 in regional subcommittees. A special subcommittee on Enhancements prepared a program in 2001-2002, using similar outreach efforts. The Air Quality/Transportation Subcommittee reviewed projects that qualified for funding under the Congestion Mitigation and Air Quality Improvement (CMAQ) Program in early 2002. Another subcommittee reviewed Bicycle and Pedestrian projects. Lastly, a subcommittee reviewed Study and Development projects from the FY 2001-2002 TIP that were at the point of advancing to full design and construction. Recommendations were made by the subcommittees to the entire TAC and reviewed by the TAC in April and May, 2000. At its May 23, 2002 meeting, the TAC voted to approve the draft TIP 2003-2004 for submission to the State Planning Council for public hearings.

Two public hearings were held by the State Planning Council on June 27, 2002. A summary of comments that were received on the draft TIP, and the responses, are presented in Appendix D.

The TIP includes all types of transportation related projects. The funding allocation programs in the current TIP include the following categories:

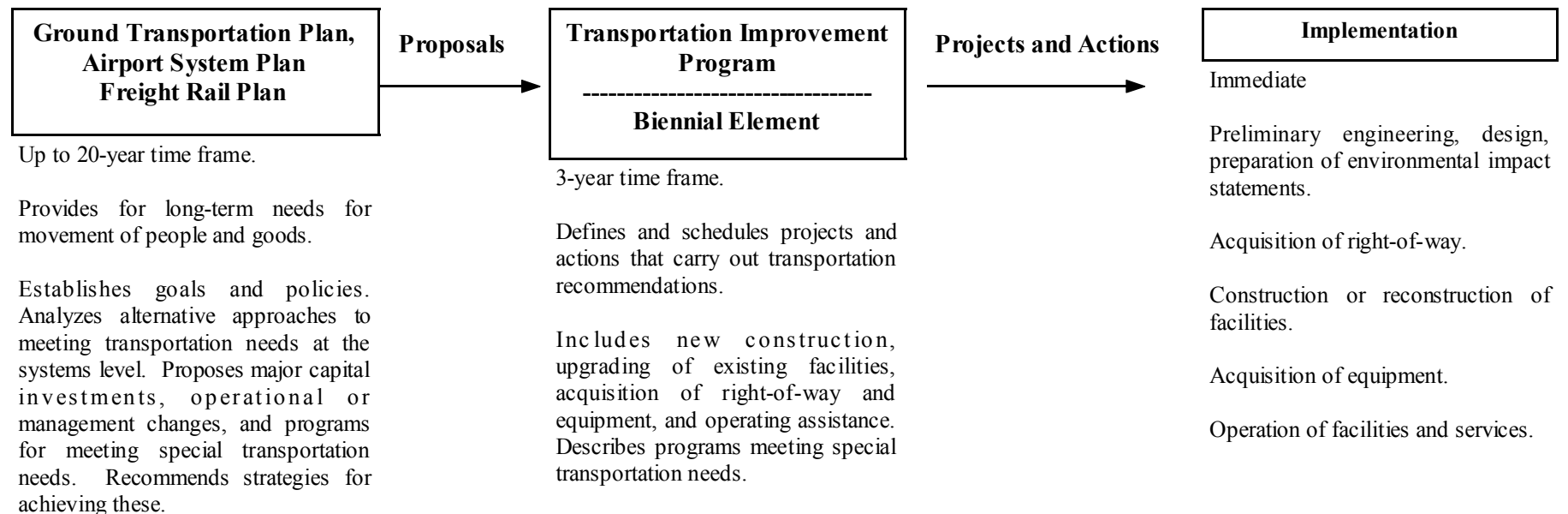
- *Administrative Program*
- *Bicycle/Pedestrian Program*
- *Bridge Improvement Program*
- *Congestion Mitigation/Air Quality (CMAQ) Program*
- *Enhancement Program*
- *Highway Program*
- *Interstate Program*
- *Major Projects with Multi Year Funding*
- *Pavement Management Program*
- *Planning Program*
- *Study and Development Program*
- *Traffic/Safety Program*
- *Transit Program*

## PART ONE: BACKGROUND

### A. THE TRANSPORTATION PLANNING PROCESS

The Transportation Improvement Program (TIP) is one part of the state's transportation planning process, as illustrated in Figure 1. The planning process begins with development of long-range plans. The State Planning Council adopts a ground transportation plan, a state airport system plan, and a freight rail plan as elements of the State Guide Plan.

**Figure 1**



Every two years, projects and actions are selected from plans for inclusion in an implementation program, called the TIP. These projects, shown in phases, are those on which the state intends to work during the short term.

The transportation plan and the TIP make the state eligible for funding from the federal highway and transit programs. To receive such funding, a project must appear in the first two years, or the so-called "*Biennial Element*" of the TIP.

## **B. ORGANIZATION FOR TRANSPORTATION PLANNING**

Rhode Island, because of its size, is unique in its organizational structure for transportation planning. Planning activities are carried out on a statewide basis rather than at both state and regional/metropolitan levels, as is the case in most other states.

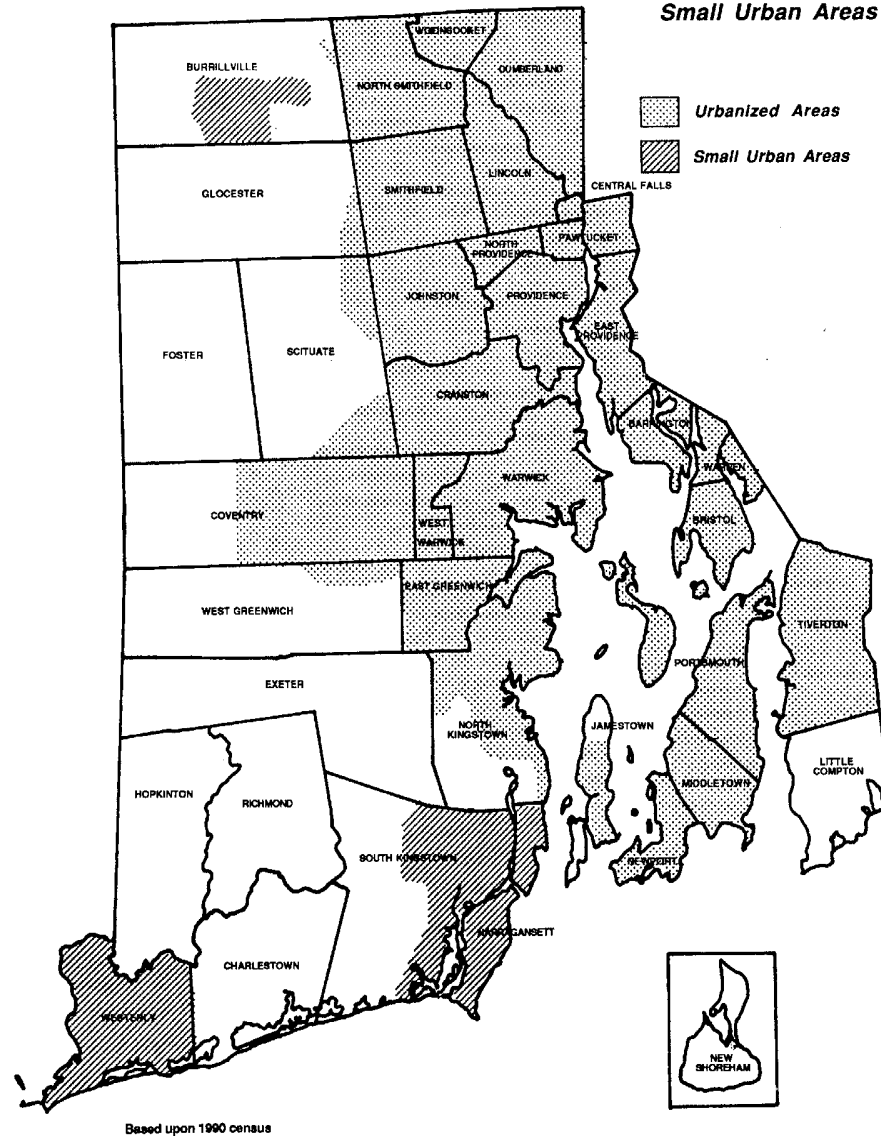
Federal regulations call for the Governor to designate a Metropolitan Planning Organization (MPO) as being responsible, along with the state transportation agency, for meeting requirements for highway and transit projects funded by the U.S. Department of Transportation. In Rhode Island, the MPO is the State Planning Council, whose staff is the Statewide Planning Program within the Department of Administration. The Council is established by state law and has seventeen members, from state executive agencies, the legislature, local government, and the public.

Federal regulations say that a TIP must be prepared for each urbanized area within a state. Rhode Island is covered by three urbanized areas (Providence-Pawtucket, Newport, and Fall River, Massachusetts) and three small urban areas (see Figure 2). The MPO, however, deals with all of the state, not just the urbanized areas. The Rhode Island Department of Transportation (RIDOT) carries out most highway projects in the state, and the Rhode Island Public Transit Authority (RIPTA) operates a statewide public transit system. It has therefore been decided to compile a single TIP for the entire state, which satisfies all requirements for metropolitan and statewide planning under federal law.

Further information is contained in State Planning Council Rule IX, "Transportation Planning and Public Involvement Procedures" (October 1994) and an accompanying background paper.



**Figure 2**  
**Rhode Island**  
**Urbanized Areas**  
**Small Urban Areas**



## **PART TWO: DESCRIPTION OF THE TIP**

### **A. PROCEDURE FOR PREPARING THE TIP**

The TIP is prepared according to State Planning Council Rule IX, "Transportation Planning and Public Involvement Procedures." A Transportation Advisory Committee (TAC), appointed by the Council, works with staff in developing a draft TIP. Membership of the TAC reflects a diversity of geographic parts of the state and of transportation interests, such as users and operators, environmental and economic development organizations, state and local officials, and interested citizens.

Local officials have an important part in developing the TIP. In November and December 2001, letters were sent to cities and towns inviting them to submit their project priorities (see Appendix A). Included with the letter were the following attachments:

- TIP Process and Schedule
- Project Submission Limits
- Submission Instructions
- Pavement Management Program Status
- Study and Development List
- Proposal Form for Resurfacing Projects
- Project Proposal Form
- Project Evaluation Criteria
- Cover Sheet for Municipal Submissions

Also in December, a letter was sent to organizations and citizens groups around the state interested in transportation planning, inviting them to participate in the TIP process (also in Appendix A). All submission materials and instructions were available for downloading on Statewide Planning's website.

In the interest of assisting communities and the public to develop their project proposals, the Statewide Planning Program, working with its partner agencies, RIDOT and RIPTA, held four workshops for local officials and the public in January 2002 to explain the TIP process and to provide access to state transportation management information and staff professionals (see Appendix B). Communities were informed that, generally, if a project was in the current (FY 2001-2002) TIP and was not yet initiated/completed, it would be included in this year's TIP with the scheduling updated to reflect the new TIP timeframe. The exception to this were projects which were in the Study & Development category. A special subcommittee was convened to review projects at 30% design and recommend for funding and implementation in this TIP or recommend no further consideration of projects determined to be infeasible. Also, local governments were urged to involve the public in the preparation of their recommendations. At a minimum, they were required to hold a local public hearing, after public notice in accordance with local procedures.

Public notice was given December 13, 2001 and January 3, 2002 of the opportunity for local officials and the public to propose projects. The Statewide Planning Program and the TAC held four public hearings throughout the state in February to receive proposals (see Appendix C). Slightly over 170 proposals were received by the February 22, 2002 deadline, from 36 of the 39 cities and towns, 5 state agencies, 1 regional agency, 1 citizen, 1 private organization, and 1 non-governmental organizations.

Highway projects were reviewed by the TAC using criteria adopted by the State Planning Council. The scoring system awarded up to 20 points in each of five major categories (mobility benefits, cost-effectiveness, economic development impact, environmental impact, and degree of support to local and state goals and plans). Projects were reviewed by the TAC in regional groups and by special subcommittees.

Certain types of projects were reviewed by special subcommittees:

- A **Transportation Air Quality Subcommittee**, assisted by RIDOT and Statewide Planning staff, reviewed proposals for the Congestion Mitigation and Air Quality (CMAQ) program.
- The TAC formed a **Bicycle/Pedestrian Subcommittee** to review these projects.

- Enhancements include projects such as pedestrian and bicycle facilities, acquisition of scenic easements or historic sites, and preservation of railroad corridors. RIDOT solicited proposals in 2001 and received 150 applications. A **Transportation Enhancements Advisory Committee** (TEAC) evaluated the proposals and recommended an Enhancements Program for consideration by the TAC.
- Additionally, projects in the current TIP in the Study and Development category that had reached 30% design were reviewed by a new **Study and Development Subcommittee**. In all cases but one, the projects were recommended for construction in the Highway or Traffic/Safety Programs.

Proposals for safety, bridge, Interstate highway, planning, and transit programs were obtained from RIDOT and RIPTA, in addition to those received from local officials and the public. RIDOT and RIPTA presented recommended programs to the TAC in February 2002. Then the TAC, using information on anticipated funding and scheduling, assembled its recommendations on all of the above programs into a financially constrained TIP list. The TAC took action on a draft TIP for FY 2003-2004 in May 2002.

Airport projects, which are shown in the TIP for information, were provided by the Rhode Island Airport Corporation. Rail projects, similarly, were obtained from RIDOT.

The draft TIP project list was reviewed by the State Planning Council and its Technical Committee starting in May 2000. The draft was also made available for review by the public and cities and towns (see transmittal letter, Appendix D).

The State Planning Council held two (daytime and evening) public hearings on the draft TIP on June 27, 2002 (advertised in the Providence Journal on June 5). A summary of the comments that were presented at the hearing or received later, along with Statewide Planning's responses, also appears in Appendix D.

RIPTA, the Federal Transit Administration (FTA) Section 5307 (c) applicant, has consulted with the State Planning Council and concurs that the public involvement process adopted by the MPO for the development of the TIP satisfies the public hearing requirements that pertain to the development of the Program of Projects for regular Section 5307, Urbanized Area Formula Program, grant applications including the provision for public notice and the time established for public review and comment.

For FTA projects that are not routine (i.e., Section 5307 applications that require an environmental assessment or environmental impact statement), the public involvement provided for TIP review is not sufficient. Additional public involvement, as presented in the FHWA/FTA environmental regulations, 23 C.F.R. part 771, will be required by FTA for grant approval.

## **B. FORMAT OF THE TIP**

The TIP presents a six-year program of funding transportation projects. For all programs, the first two years, federal fiscal years 2003 and 2004, comprise the Biennial Element, in which projects must appear to receive individual funding authorization. Also shown, for planning information purposes, are the years FY 2005 through 2008.

Airport, freight rail, and Indian Reservation Road projects are governed by separate federal requirements. They are not required to be in the TIP but are included for planning and informational purposes.

For each project, a description and location and an estimated cost are given. Also shown, for highway projects, are the phases for the time periods in which federal funding authorization is anticipated. The phases are: administration ("a"), construction ("c"), engineering or design ("d"), preliminary evaluation ("e"), operations ("o"), right-of-way acquisition ("r"), and study and development ("s").

## **C. PROJECT IMPLEMENTATION AND FUNDING**

Projects and Programs included in the TIP are implemented by the responsible state agencies, RIDOT and RIPTA, based on project mode. In general, bus and ferry projects are implemented by RIPTA while highway, bicycle/pedestrian and rail projects are implemented by RIDOT. These agencies must include the funding for the TIP projects within their annual budgets. Generally, federal funds for both highway (FHWA) and rail (FTA fixed guideway) projects flow through RIDOT which acts as the recipient for these federal funds. RIPTA is the designated recipient for other categories of federal transit funds.

The federal funding available to Rhode Island for transit and highway projects is established by the Congress in TEA21, subject to the annual appropriations process. This program is in effect through fiscal year 2003. Fiscal year 2004 will be covered under the new funding program, popularly known as "TEA-3". This has not yet been authorized, and funds that may be available to Rhode Island are unknown at this time. Funding from the FHWA for 2003 is based on funding notices provided by FHWA with no RABA adjustment. Fiscal year 2004 and future year FHWA funding was based on TEA21 guaranteed levels. Discretionary funding was assumed for all years based on levels received in the last few years.

FTA funding was assumed at 5% below the TEA21 guaranteed level based on the actual receipt of funds over the past 5 years.

These federal funds must be matched in varying amounts with state funds, generally in a ratio of 80% federal and 20% State. For the highway program, the State has traditionally used General Obligation bonds for the State project contribution. Bond revenues are placed in a special fund called the Highway Fund from which project payments are made and which is replenished with reimbursements from the federal government for a percentage of eligible expenditures.

Unfortunately, the “build now-pay-in-the-future” approach of reliance on bonds to provide the state highway program match has resulted in a heavy burden for the state: debt service payments of over \$40 million per year. In order to reduce the growth in debt service and to limit the state's bonded indebtedness, the Capital Budget limits highway bond issuance to \$30 million per year. Additional funds are needed to provide the state match to federal highway projects. A portion of the state gasoline excise “gas” tax funding and other funds will be utilized to provide the needed state match.

Transit funds utilize a variety of funds for match. Table 1 and Figure 3 show the funding that is expected to be available for implementation of TIP projects in FY 2003-2004.

**TABLE 1 TIP Funding Resources**

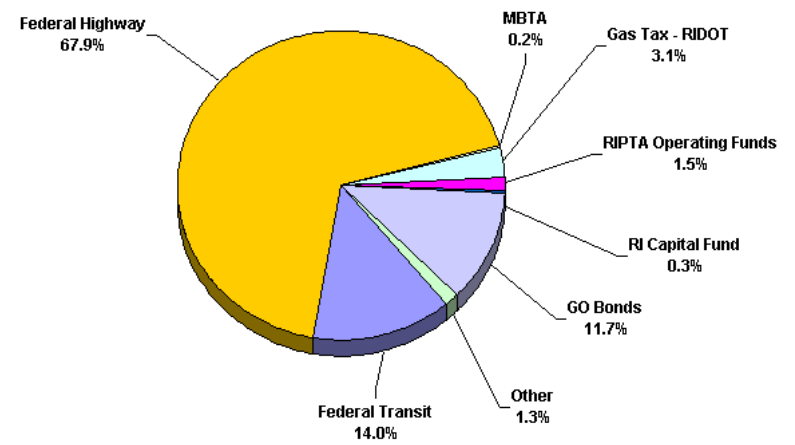
(millions of dollars)

Source	Highway	Transit	Total
Federal Transit		\$72.89	\$72.89
Federal Highway*	\$354.20		\$354.20
Gas Tax - RIDOT	\$16.00		\$16.00
RIPTA Operating Funds		\$7.61	\$7.61
Para-transit Revolving Fund		\$0.56	\$0.56
RI Capital Fund		\$1.43	\$1.43
General Obligation Bonds	\$60.00	\$1.11	\$61.11
MBTA		\$1.14	\$1.14
Other		\$6.38	\$6.38
<b>Total</b>	<b>\$430.20</b>	<b>\$91.12</b>	<b>\$521.32</b>

Includes \$10 million in increased Advanced Construction

**Figure 3**

**Anticipated Funding FY 03-04**



## D. STATUS OF THE TIP

The State Planning Council adopted this TIP on August 8, 2002. It has been approved by the Federal Highway Administration and Federal Transit Administration. The Environmental Protection Agency has approved the air quality and conformity analysis.

## PART THREE: ANALYSIS OF THE TIP

### A. SUMMARY BY TRANSPORTATION MODE AND PROJECT PURPOSE

Transportation in Rhode Island is supported by federal funding assistance from four U.S. Department of Transportation (USDOT) modal agencies:

- Federal Highway Administration (FHWA)
- Federal Transit Administration (FTA)
- Federal Railroad Administration (FRA)
- Federal Aviation Administration (FAA)

While the FRA and FAA make significant contributions to the State's transportation system, the TIP only has legal affect over funds distributed by FTA and FHWA. Those programs are of tremendous importance to the State as the total program funding expected (federal funds plus state match) from these modal agencies over the six-year period is estimated to be over \$1.5 billion. Figure 4 shows the expected federal funding from FHWA and FTA during the biennial years of the TIP FFY 2003 and 2004.

Figure 4

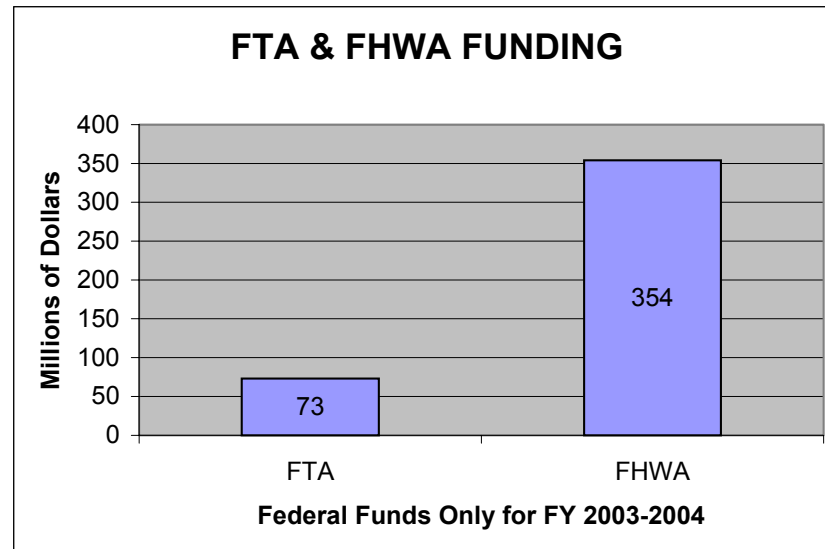
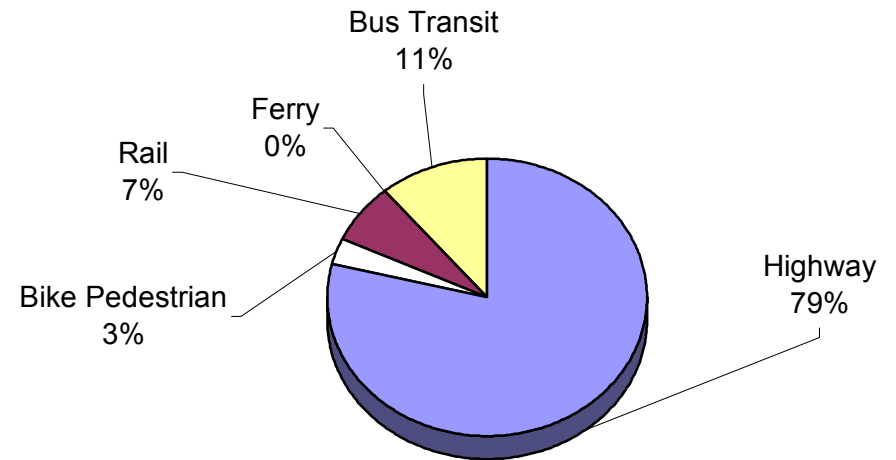




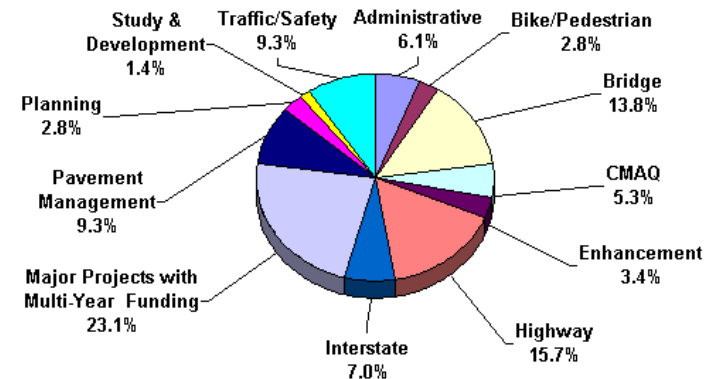
Figure 5

**Funding Allocation by Mode**

While FHWA primarily funds highway projects and FTA transit projects, federal legislation provides considerable flexibility in the use of federal funds leaving it up to the States to choose how to use these funds. Rhode Island has chosen a balanced approach in funding transportation projects providing funds to all modes. Figure 5 shows the funding allocation for the TIP's Biennial Element (FFY2003-2004) by transportation mode. Rhode Island's transportation program earmarks over 24% of its capital funding to alternate modes of transportation, primarily rail and bus. This funding allocation shows an emphasis on encouraging alternatives to the automobile for transportation.

Figure 6

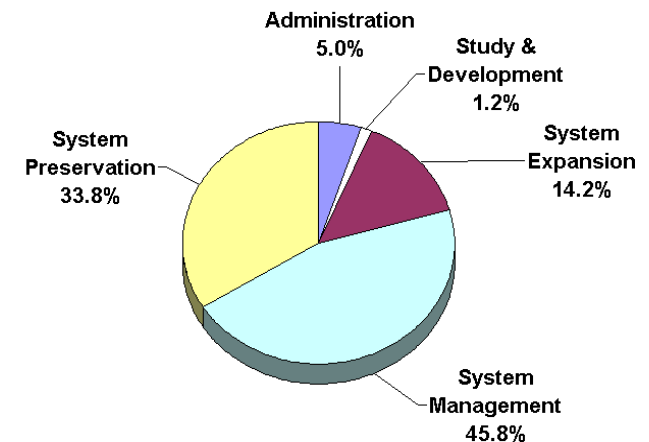
**FHWA Program by Category**



Despite encouragement of alternative modes, highway travel remains the primary mode of travel in Rhode Island and elsewhere, and highway projects continue to play a major role in the state's TIP. Figure 6 breaks down the highway program by project type. The chart shows that the Major Projects Program is allocated the largest percent of the funding with 24%. Included in this category are three major highway, bridge, and Interstate projects (Interstate 195 Relocation, Quonset Access Road, and Washington Bridge). Other programs receiving major funding allocations are: Highway Program (16%), which includes road reconstruction work, Bridge Program (14%), Traffic Management/Safety (9%), and Pavement Management (9%).

Figure 7

**Functional Allocations**



While it is valuable to examine the TIP program by mode, all transportation modes really have the same purpose of moving people and things effectively and efficiently. By grouping all highway and transit projects together a complete picture of Rhode Island's recent emphasis in transportation investments can be seen. For this purpose, projects are divided into categories based on their function or purpose. A description of each category and the percentage of the FTA and FHWA program funding allocated to the category is presented below: Figure 7 illustrates this funding allocation.

*Administrative (5.0%)* - includes general expenditures which cannot be readily attributed to a specific functional category. Project modifications are the largest item this category.

*Study & Development (1.4%)*- This program defines transportation needs and develops transportation solutions to meet those needs. Funding is used to plan and study appropriate transportation alternatives. Project planning, project engineering (typically to 30% design) and project related studies are included in this category. Final design is included within the funding program (e.g. highway or bicycle).

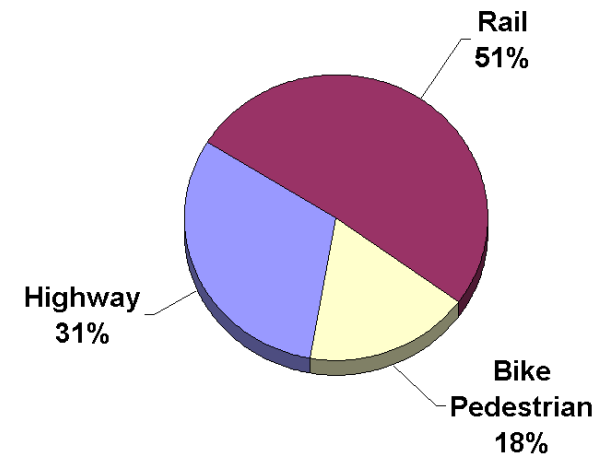
*System Preservation (33.4%)*- Projects in this category are designed to preserve Rhode Island's existing infrastructure, or simply put, to keep what we already own in a good state of repair. Work on the existing Interstate segments and bridges, highway reconstruction projects and pavement management projects are all included in this category.

*System Management (45.8%)* - Changes to improve the existing system to restore or increase original capacity is the purpose of these projects and programs. Included in this category are transportation enhancements, air quality improvement projects, traffic management projects and projects that encourage the use of transit.

*System Expansion (14.2%)* - These projects represent strategic investments that add capacity to the system by addition of new facilities (e.g, construction of a new bikepath), or enlargement of existing facilities (e.g., addition of lanes to a highway). Included in this category are the Quonset Access Road, the bicycle path construction program as well as the rail expansion projects (Warwick Train Station).

Figure 7 above illustrates that the primary emphasis of the state's transportation investments is on *preserving* and *enhancing* the existing transportation system; not on expanding the system's facilities. The program focuses primarily on maintaining Rhode Island's existing transportation infrastructure, while continuing to make limited strategic investments in new development.

Figure 8

**System Expansion by Mode**

The nature of the limited investments in system expansion is shown by mode in Figure 8. In terms of dollars, the majority (some 51%) of the TIP's system expansion investments are programmed for rail expansion projects, including the Warwick Train Station. Traditional highway projects account for 31% of system expansion investments programmed, and bicycle system projects represent some 18%. It should be noted that the funding for the rail projects is expected to come from Congressionally-earmarked funds which will not reduce the funding available for other transportation projects as well as FTA formula funding for fixed guideway. Rhode Island's TIP clearly reflects the "fix-it-first" philosophy, and the belief that new highways are *not* the solution to improving the transportation system.

## B. FINANCIAL ANALYSIS

### Funding Requirements for the Biennial Element

Federal regulations mandate that the TIP be financially constrained. From a state perspective it is appropriate to designate only program funds that are likely to be available, so that public expectations are not raised to a level that can not be met. A separate fiscal constraint analysis was made for both the Highway program and the Transit program, and have been included in this section of the TIP.

### Highway Program

The availability of federal highway funds (not including discretionary projects) was estimated as follows.

Federal Fiscal Year	Million Dollars	
	Federal	Total
2003	173	211
2004	181	219
2005	181	219
2006	181	219
2007	181	219
2008	181	219

This table represents the federal contractual authority expected to be available to the State to use Federal Highway apportionments. Using these estimates, a biennial element total of \$430 million of highway funds is expected to be available for FFY 2003 and FFY2004. The TAC used this funding as a guideline in establishing the overall TIP program level for non-discretionary highway projects.

## Highway Program

Federal Highway Administration funds are allocated to the state in numerous categories. The major funding categories are described below;

### 1. National Highway System (NHS)

The NHS consists of major roads in the United States, including Interstate highways, a large percentage of urban and rural principal arterials, the Strategic Defense Highway Network (STRAHNET), and strategic highway connectors.

*Interstate:* The Interstate system, which is a component of the NHS, is funded at a 90 percent federal share. Although part of the NHS, the Interstate System retains its separate identity and funding. The purpose of these highways is to connect the principal metropolitan areas, cities, and industrial centers by routes as direct as possible and to serve the national defense. Activities eligible for funding include design, right-of-way acquisition, and construction of Interstate highways.

*Interstate Maintenance:* This program funds projects to rehabilitate, restore, and resurface the Interstate system. Reconstruction is also eligible if it does not add capacity, and High-Occupancy-Vehicle (HOV) lanes can be added. The purpose of this funding is to maintain the existing Interstate system at acceptable levels of performance.

### 2. Surface Transportation Program (STP)

The STP is a block-grant-type program that may be used by the states for any roads (including NHS) that are functionally classified above local. Bridge projects paid for with STP funds are not restricted to federal-aid roads but may be used for any public road. Transit capital projects are also eligible under this program. States must set aside 10 percent of STP funds for safety construction projects and 10 percent for transportation enhancements.

### 3. Congestion Mitigation and Air Quality (CMAQ) Program

The CMAQ program directs funds toward transportation projects in areas that have been classified under the Clean Air Act as being in non-attainment of the ozone and carbon monoxide standards. Implementation of these projects is intended to contribute to attainment of air quality standards.

Rhode Island remains a "serious" non-attainment area for ozone. The state has established procedures that will assign a high priority to projects with air quality benefits. The State Planning Council's Technical Committee has established a Transportation Air Quality Subcommittee that has been charged with recommending CMAQ projects for inclusion in the TIP.

#### 4. Bridge Program

The purpose of this program is to replace or rehabilitate important highway bridges on any system, based on bridge sufficiency ratings. Other eligible activities include bridge preventive maintenance, bridge inspection, and seismic retrofitting.

#### 5. Highway Safety Redistribution Funds

Because Rhode Island has not enacted legislation that criminalizes drunk driving offenses with 0.08 blood alcohol concentration, a portion of the FHWA funds earmarked for the State will be withheld each year and will face lapse after four years. If Rhode Island does not enact complying legislation, the funds that would be withheld are listed below:

FY 2004	2%	\$1.7M
FY 2005	4%	\$3.5M
FY 2006	6%	\$5.2M
FY 2007	8%	\$6.9M

This has the potential to exacerbate an already difficult funding situation, and steps should be taken to ensure that Rhode Island's laws meet federal thresholds.

#### 6. Minimum Guarantee

This is a very flexible category that can be used for virtually any project eligible under any other federal funding category. These funds are administered like STP funds.

## 7. Recreational Trails

This funding, begun under ISTEA and continued under TEA21, is specifically earmarked for the creation, rehabilitation and maintenance of multi-use recreational trails. In Rhode Island, the R.I. Trails Advisory Committee advises on the distribution of these funds and assists the Departments of Environmental Management and Transportation in overseeing the implementation of projects.

## 8. Planning

Federal Highway Administration funding is specifically set aside for each state to conduct the metropolitan and statewide planning activities needed to support development of the long range transportation plan, the and transportation improvement programs, and to conduct state transportation planning and research activities. Funding is also available from the Federal Transit Administration for metropolitan and transit planning.

## 9. ISTEA Demo & High Priority

These are funds earmarked in federal legislation for specific Rhode Island projects.

In order to assure that the TIP program is fiscally constrained, it is necessary to show that the TIP projects can be implemented with categorical funding likely to be available to the State. Table 2 shows the results of this fiscal constraint analysis and the expected Federal Highway apportionments by funding category. The last column in the table shows the likely TIP program allocations for each funding category. The analysis indicates that there is sufficient funding in each category to implement the Highway TIP program.



**Table 2**  
**Fiscal Constraint Analysis**

**Federal Highway Administration**  
*(amounts shown in thousands of dollars)*

	<b>Un-obligated Balance 07/16/2002</b>	<b>Apportionment FY 2003-2004</b>	<b>Total Federal Funds Available</b>	<b>Match Required</b>	<b>Total Available</b>	<b>Program FY 2003-2004</b>
<b>Interstate Maintenance</b>	\$6,777	\$23,266	\$30,043	\$3,338	\$33,381	\$30,000
<b>NHS</b>	\$21,728	\$90,157	\$111,885	\$27,971	\$139,856	\$99,500
<b>STP</b>	\$27,932	\$73,367	\$101,299	\$25,325	\$126,624	\$106,300
<b>Bridge Rehab and Replacement</b>	\$88,619	\$104,410	\$193,028	\$48,257	\$241,285	\$110,300
<b>CMAQ</b>	\$861	\$16,214	\$17,076	\$4,269	\$21,345	\$22,900
<b>Recreational Trails</b>	\$874	\$1,042	\$1,917	\$479	\$2,396	\$1,200
<b>Metro Planning</b>	\$3,729	\$1,955	\$5,684	\$1,421	\$7,105	\$2,000
<b>High Priority</b>	\$11,276	\$5,471	\$16,747	\$4,187	\$20,933	\$8,500
<b>Highway Safety Redistribution</b>		\$5,000	\$5,000	\$1,250	\$6,250	\$4,000
<b>Minimum Guarantee</b>	\$4,855	\$33,417	\$38,272	\$9,568	\$47,840	\$40,000
<b>SPR</b>	\$1,980	\$1,761	\$3,741	\$935	\$4,676	\$4,600
	\$168,631	\$356,061	\$524,692	\$127,000	\$651,692	\$429,300

It is difficult to advance all projects to construction on schedule. Design can be more complicated than anticipated, environmental permits not anticipated can be required, or community coordination could take longer than anticipated. To account for these problems, RIDOT needs some flexibility to advance another project when one is delayed. To provide this flexibility, the TIP is adopted as a biennial element (for two years). RIDOT will be able to advance any FFY 2003 or 2004 project.

“Project Modifications”, shown in the Administrative Program, provides funding for modifications to federal project agreements due to increases in construction project costs while the project is being implemented. RIDOT’s goal is to limit such changes to 10 percent or less of project estimates.

The TAC made strenuous efforts to produce a financially reasonable program. As previously discussed, a limited amount of funding is anticipated to be available for this TIP. Nearly all of these projects requested by cities and towns, RIDOT, RIPTA, and others addressed needs and would have been appropriate to include, if funding were unlimited. However, the requested projects exceeded the available funding. Difficult decisions were required by the TAC to develop this balanced and realistic program.

### **Financial Capacity for Transit Grants**

The Federal Transit Administration (FTA) requires that grantees have the financial capacity to carry out proposed transit projects. Financial capacity refers to (1) financial condition of the transit operating agency, and (2) financial capability in terms of reliable revenue sources.

The Biennial Element (the first two years of the program) includes RIPTA capital assistance in both years. Buses are scheduled for replacement in each year through 2008. Capital improvements are also programmed. These RIPTA projects all relate to a goal of expanding and maintaining service quality of public transit. Financial capacity has to be viewed within that context.

RIPTA’s operating budget is financed by three main sources: fare revenue, state funding dedicated from gasoline tax revenue, and federal capital funding for operating expenses (preventive maintenance). Since 1980, RIPTA farebox revenue has declined as a percentage of total revenue, but the absolute amount has increased. General fare increases were instituted in 1981, 1983, 1988, 1989, 1991, 1996 and 1999.

The state funding for RIPTA operations comes from dedicated state gasoline tax proceeds. The State and RIPTA determined this funding source, after extensive analysis of alternatives, to be the most appropriate. It is a relatively reliable funding source, since gasoline consumption does not fluctuate more than a few percentage points each year. RIPTA’s dedicated share is presently six and one-quarter cents of the total thirty-cent tax. (One cent generates approximately \$4.7 million). An additional one-cent is dedicated to provide service for elderly and disabled individuals.

There are no sources of dedicated tax revenue for non-RIPTA transit activities.

RIPTA's capital needs have been provided by state transportation bond issues that are matched with 80 percent federal capital assistance. Past transportation bond referenda in Rhode Island have been successful, showing the public's willingness to pay for highway and transit improvements. The next referendum for transit is scheduled for November 2002. The State Capital Budget, however, does not provide adequate funding to meet the transit needs identified in the TIP. New gas-tax financing for transit operations and capital requirements, or a combination of gas tax, general obligation bonds and capital fund dollars will be needed. Non-RIPTA capital projects (e.g., passenger rail, marine transportation, and other new transportation systems and services) will require new state sources to match FTA and FHWA capital funding. Table 3 provides a fiscal constraint analysis for FTA funding.

Table 3  
Financial Constraint Analysis

## **Freight Rail Improvement Program**

The State is implementing the Freight Rail Improvement Program (FRIP) with Federal Railroad Administration (FRA) and other funding to achieve the following goals:

- Increase operating times available for freight operation, which are being greatly reduced by Amtrak's electrification project;
- Increase freight efficiency and effectiveness;
- Provide tri-level clearance between Boston Switch and Davisville;
- Provide for increased passenger safety on the Amtrak main line; and
- Provide for future commuter rail, off of main line, between Warwick and Providence.

Funding for this project comes primarily from the Federal Railroad Administration, RI Economic Development Corporation bonds, and bridge work included in prior year TIPs. It is not clear whether additional Bridge Program funds will be necessary for FRIP completion. As the project approaches the final stages and the final project budget is determined, additional FHWA funding that may be required for the project may come from the Bridge Program in this TIP. The FRIP was made eligible for FHWA funds in the National Highway Systems Bill. The project is expected to be completed in late 2005.

## **Airport Improvement Program**

Rhode Island receives Federal Aviation Administration (FAA) funding through three sources: entitlements, general discretionary funds, and special discretionary (noise abatement) funds. Entitlement funds are awarded on the basis of percentage of national aviation activity.

General discretionary funds are awarded competitively. They are used for North Central and Quonset State Airports, which are designated reliever airports and cannot receive entitlement funds. Special discretionary funds are used for noise abatement projects. Since Rhode Island has an FAA-approved Part 150 Noise Study/Plan for T.F. Green State Airport, the state is eligible for such funds. These are also awarded on a competitive basis.

The continued dramatic growth of passengers utilizing the new T.F. Green State Airport requires continuing investments. In addition, the Corporation's investment plan addresses needs of general aviation airports. The Rhode Island Airport Corporation is currently in the process of updating the master plan for T.F. Green Airport, as well as updating the Airport System Plan.

## C. ENVIRONMENTAL JUSTICE

State and local governments have been encouraged to propose projects for the TIP that would benefit minority neighborhoods. The TAC's criteria for evaluating proposals included "support of state-designated enterprise zones," "benefit to economically disadvantaged populations," and "consistency with environmental justice for minority and low-income populations." Communities containing Enterprise Zones were permitted to submit one additional proposal, beyond the maximum allowed based on population, if that project is in the Zone. The TAC used a guidance document and project data sheets to determine how well proposals met these criteria. The evaluation became part of the project scoring and ranking.

To a large extent, the benefits of a transportation project to minority neighborhoods depend on how it is designed and constructed; for example, whether it enhances the area physically or provides employment and contracting opportunities for local residents. The TAC recognized the potential for these benefits, but they are controlled by RIDOT or other operating agencies once a project is started. Local governments also have an important role in identifying, guiding, and implementing projects that benefit their minority neighborhoods.

A quantitative analysis was made of projects that are programmed for minority areas in the Biennial Element (except bridges, study and development and statewide projects such as highway striping). "Minority" was defined as including four groups: Black, Hispanic, Asian, American Indian and, in compliance with the Environmental Justice Order, Low Income (Poverty). Minority neighborhoods were assumed to exist in any census tract where the minority population as a percentage of total population in the 2000 Census was greater than the average percentage minority population for the state. This is the measure specified by FTA for documentation under Title VI of the Civil Rights Act.

For the highway-funding program, the result of this analysis was a list of projects located in census tracts with greater-than-average percentages of minority populations. One hundred and one TIP projects were mapped. All of the minority population groups were located with respect to project alignments. The results of this analysis are presented in Table 4.

## Table 4

In nearly all cases, the percentage of transportation improvement projects in the minority and low-income census tracts exceeds the percentage of the minority population. In the Bicycle Pedestrian Program, the vast majority of projects are in minority census tracts. The one exception is the number of Enhancement projects in Hispanic census tracts, but the dollar value of these same projects, as a percent of the total Enhancement Program, exceeds the minority population percentage. The implementation of the projects in this TIP is extremely equitable and beneficial to Rhode Island's disadvantaged citizens.

As for transit projects, the entire RIPTA system (which receives much of this funding) serves minority neighborhoods. The RIPTA route system has Providence as its hub, with additional intra-city service in Pawtucket, Woonsocket, and Newport. This corresponds well with areas where the most numerous minorities are concentrated. The paratransit service is now a statewide system. A more detailed discussion can be found in the state's submission to FTA under Title VI of the Civil Rights Act. The commuter rail projects cover a large geographic area, including Providence with its greater-than-average minority concentration.

## **D. AIR QUALITY ANALYSIS**

The firm of Vanasse, Hangen, Brustlin, Inc. was engaged by the Statewide Planning Program to conduct an air quality analysis of the FY 2003-2004 TIP. The results of that analysis are summarized here and were the subject of consultation with the RI Department of Environmental Management (DEM) and US Environmental Protection Agency (EPA). The purpose of the analysis is to evaluate the TIP's impact on the State Implementation Plan (SIP) for air quality. The Clean Air Act Amendments (CAAA) of 1990 established new requirements for transportation plans and programs. EPA published a final rule on November 24, 1993, with procedures to be followed in determining the conformity of transportation plans, programs, and projects with the SIP. The regulations require that emissions resulting from implementation of plans and programs be less than mobile source "budgets" established in the SIP.

The State of Rhode Island is designated as a "serious" non-attainment area for ozone. The City of Providence is a "maintenance area" for carbon monoxide. The EPA's conformity regulations require that the TIP and long range plans be evaluated for emissions impacts in both nonattainment and maintenance areas. Accordingly, this analysis evaluates change in ozone precursors (volatile organic compounds – [VOC] and oxides of nitrogen – [Nox]) and carbon monoxide [CO] emissions due to implementation of the TIP and plan.

The traffic data were obtained from the Rhode Island Statewide Travel Demand Model (TDM). The TDM was updated to include additional roadways, modeling zones, and current planning assumptions. Consistent with federal guidance, the traffic data were adjusted to account for the following factors, Highway Performance Monitoring System, seasonal adjustment for pollutants, and peak and off-peak periods.



Emission factors were derived using the EPA's mobile source emission factor model MOBILE5b and reflect Rhode Island-specific conditions, such as the motor vehicle fleet mix from year 2000 registry data, the statewide Inspection and Maintenance (I/M) Program, and the Stage II Vapor Recovery System. The traffic and emission factor data were calculated on a link-by-link basis in the EPA's Air Information Retrieval System (AIRS) format, which is consistent with previous TIP analyses.

The results of the air quality analysis, presented in Table 5, demonstrate that projected emissions under the TIP's "Build" scenarios are below the Rhode Island State Implementation Plan's emission budgets of 41.57 tons per day of volatile organic compounds and 46.40 Tons per day of Nitrogen Oxides.

In summary, the air quality analysis demonstrates that implementation of the TIP 2003-2004 and the state's long range transportation plan is consistent with federal air quality conformity criteria and regulations, and conforms to the air quality goals in Rhode Island's State Implementation Plan.

**Table 5**  
**TIP Conformity Analysis – Statewide Model Results (tons/day)**

	Statewide			Providence	
	DVMT	VOC	NOx	DVMT	CO
2003 Base Year	25,318,188	31.42	43.71	3,420,135	71.9
1999 SIP Budget	---	41.57	46.40	---	---
2013 No Build	27,965,864	30.64	43.14	3,598,758	63.0
2013 Build	27,930,433	30.53	43.10	3,583,952	62.8
2023 No Build	31,019,064	33.71	46.25	3,815,119	69.3
2023 Build	30,990,314	33.60	46.22	3,804,470	67.7

## PART FOUR: PROGRAM OVERVIEW

For years, Rhode Island under-invested in the preventive maintenance of its crucial transportation system infrastructure. Beginning with TEA 21, the 1998 Ground Transportation Plan, national and state policy has begun to embrace a "Fix-It First" philosophy – a decided change in approach to the transportation system. The last TIP (2001-2002) reflected this policy via its emphasis on investments to preserve, manage and enhance the transportation system, and limited strategic investments in the expansion of its components. After years of under-investment in preventive maintenance, Rhode Island has begun to make progress in addressing the deteriorated state of its crucial transportation infrastructure. This has made a difference. Reducing the scope of projects in the program has increased the number of projects which can be undertaken with available resources. Roads are being repaved and bridges repaired throughout the state at an unprecedented rate. This TIP continues that direction:

### **The Vast Majority of Available Funding is Allocated to System Preservation and System Management Projects and Activities**

This TIP continues the emphasis on ***maintaining*** and ***managing*** our existing system, with 79% of the available FHWA and FTA funds devoted to such projects. As in the previous TIP, the only major highway system expansion project programmed in the TIP is the Quonset Access Road. To provide an alternative to single occupancy auto travel, other system expansion efforts are focused on intermodal projects such as the Warwick Train Station and fully developing a statewide bicycle system.

### **The TIP Program Categories and Federal Program Funding Allocation Remain Substantially Unchanged**

The program categories and funding allocations for Federal Highway Administration (FHWA) projects have allowed Rhode Island to address its transportation infrastructure needs in a fiscally responsible manner. This TIP continues the past programs and funding levels with only minor adjustments. Table 6 below lists the categories continued in the TIP with 2 year program totals and the percentage of the entire TIP amount.

Table 6

<b>TIP Category Funding Distribution</b>		
<b>2003 - 2004</b>		
<b>TIP Category</b>	<b>Total (\$m)</b>	<b>Percent</b>
Administrative Program	\$26.2	5.0
Bike/Pedestrian Program	\$11.9	2.3
Bridge Program	\$59.3	11.4
CMAQ Program	\$22.9	4.4
Enhancement Program	\$14.5	2.8
Federal Transit Program	\$91.1	17.5
Highway Program	\$67.5	13.0
Interstate Program	\$30.0	5.8
Major Projects with Multi Year Funding	\$99.0	19.0
Pavement Management Program	\$40.0	7.7
Planning Program	\$12.0	2.3
Study & Development Program	\$6.0	1.2
Traffic Safety Program	\$40.0	7.7
<b>Total</b>	<b>\$520.4</b>	

## ADMINISTRATIVE PROGRAM

Under this program, funds are allocated to support Equal Employment Opportunity activities and the Motor Fuel Tax Evasion enforcement effort, and provide for construction project modifications and change orders.

### *Project Modifications/Change Orders*

During the last few TIPs, funds have been set aside for construction project modifications that invariably happen. RIDOT has been increasingly vigilant in controlling change orders in recent years. This TIP budgets \$12 million per year, approximately 10% of the total funds allocated to the highway construction program for highway construction contracts, for project modifications/change orders. RIDOT's goal is to continue to reduce change orders even further.

### *Advanced Construction*

Federal regulations require the authorization of *all federal highway funds necessary* to complete a project at the time of project commencement unless the State utilizes Advanced Construction. Since most of the TIP projects are multi-year in nature, federal funds are tied up in projects that won't use the funds for months and maybe years into the future. Since the amount of federal funds available to the State is limited, large multi-year projects can greatly reduce the amount of funds available for smaller projects. Advanced construction is a financing tool where the State is able to phase the federal funding to match the annual project anticipated need. Federal funds in the first year for Advanced Constructed projects are authorized only for anticipated expenditures. In future years federal funds are authorized to cover each year's annual anticipated expenditures. The authorization of federal funds in future years is known as Advanced Construction Conversion.

The risk in Advanced Construction is that projects are started in anticipation of receipt of federal funds. If the federal funds are reduced in future years, the State may not be able to obtain federal reimbursement immediately for project expenditures. To limit the State's liability for Advanced Construction, the State has chosen to limit itself to \$25 million of total Advanced Construction for the annual highway program. As Advanced Construction projects are converted by application of federal funds, new projects are started with Advanced Construction in an equal amount. This process has no net affect on the program. Table 7 lists projects that were started using Advanced Construction funding, and which are expected to be converted during the first two years of the TIP.

**Table 7**  
**Advanced Construction Projects**  
*As Of 07/01/02*  
**Federal Dollars**

Project Description	Advanced Project Number	Project Number	Amount
1R Imp to Elmwood Ave. Cranston	ACSTP-RESF(026)	STP-RESF(026)	679,241.74
3R Imp. To Harris Ave., Woonsocket	ACSTP-RRR(010)	STP-RRR(010)	3,440,000.00
Cranston Street Viaduct No. 453	ACBRO-0453(002)	BRO-0453(002)	5,379,187.84
Harris Ave. Adv. Utilities, Woonsocket	ACHPP-1202(002)	HPP-1202(001)	157,850.49
PE Bridge Rehabilitation	ACBHO-BCDR(010)	BHO-BCDR(010)	1,716,000.00
Safety Imp. to I-95 Ramps C2E, Pawt.	ACBHO-0563(001)	BHO-0563(001)	1,194,158.90
Sockanosset Cross Rd, Cranston	ACSTP-0002(016)	STP-0002(016)	4,400,000.00
Sockanosset Cross Rd, Cranston	ACSTPG-0002(017)	STPG-0002(017)	442,543.67
Woonsocket Depot Intermodal Facility	ACPLH-F005(012)	PLH-F005(012)	650,083.50
		Total	18,059,066.14

Rhode Island has embarked on two major projects that could not be funded without the use of Advanced Construction: the Relocation of I-195 and the Quonset Access Road. Rhode Island's annual allocation of federal funds is insufficient to fully fund these projects in any one year. Therefore, the TIP allocates funds for these projects annually in anticipation of the project's multi-year expenditure schedule. The Advanced Construction for these projects are not subject to the State's self imposed \$25 million limit. Another major project that will require Advanced Construction funding, replacement of the Washington Bridge, is anticipated to begin in FY 2004. The Advanced Construction status of these projects is shown in Table 8.

**Table 8**  
**Major Project Advanced Construction**  
*As Of 07/01/02*  
**Federal Dollars**

Project Description	Advanced Project Number	Project Number	Amount
I-95 Relocation	ACMNG-1950(100)	MNG-1950(100)	7,295,314.92
I-95 Relocation	ACMNG-1950(200)	MNG-1950(200)	810,590.15
I-95 Relocation	ACMNG-1950(300)	MNG-1950(300)	800,000.00
I-95 Relocation	ACMNG-1950(400)	MNG-1950(400)	810,590.15
Quonset Access Road	ACNHS-0403(010)	NHS-0403(010)	6,500,000.00
Quonset Access Road	ACSTP-QPDA(002)	STP-QPDA(002)	124,273.60
Quonset Access Road	ACNHS-0403(004)	NHS-0403(004)	9,067,100.96
Quonset Access Road	ACBRO-0536(001)	BRO-0536(001)	5,000,000.00
		Total	30,407,869.78

## ADMINISTRATIVE PROGRAM TABLES

## **BICYCLE/PEDESTRIAN PROGRAM**

Rhode Island's Bicycle/Pedestrian Program includes the planning, design and construction of independent bicycle paths (shared use paths) and walking trails, on-road bicycle lanes, on-road bicycle routes (signing and striping), and bicycling/pedestrian promotional programs and materials production (i.e. statewide bike map, safety programs). RIDOT administers the Bicycle Pedestrian Program, which is funded through several federal funding sources, and State matching funds. These funding sources include: the TEA-21 High Priority Program, the Congestion Mitigation/Air Quality Program (CMAQ), the Enhancements Program, the Public Lands Highway Program (PLH), the Recreational Trails Program and STP funds.

Completion of four major independent bike paths (Blackstone River Bicycle Facility, Northwest Bike Trail/Woonasquatucket River Greenway, South County Bike Path, and Washington Secondary Bicycle Facility) that will form the spine of the State Greenway System continues to be a major emphasis of the Program.

Projects in the Bicycle/Pedestrian Program are divided into the following categories:

### *Study and Development*

Projects entering the Bicycle/Pedestrian Program go through a study and development phase (analogous to Study & Development for Highway projects) which allows the project concept to be scoped and assessed in terms of environmental impact, community acceptability, constructability, and cost. This allows for informed decisions on project feasibility prior to entering the design phase. Projects for which the Study and Development phase was begun in the previous TIP (funds were authorized) and are continuing in Study and Development have been listed, as well as the new projects that have been added through the recent TIP project solicitation and evaluation process. A total of \$0.5 million has been programmed for the study and evaluation of the newly added bicycle/pedestrian projects.



### *Project Implementation*

Considering funding anticipated to be available from all program sources, the TIP includes nearly \$17 million for the design and construction of bicycle/pedestrian projects during FY 2003-2004. During the design phase, a project is taken from a conceptual level through final design. Construction documents are prepared and put out to bid for construction. The following projects will be under design over the next two years: segments of the Blackstone River Bicycle Facility, the Washington Secondary/Coventry Greenway, the Warwick/East Greenwich Bike Network, and the Pontiac Secondary Bike Path. The following projects are scheduled for construction over the next two years: segments of the Blackstone River Bicycle Facility, the Northwest Bike Trail/Woonasquatucket River Greenway, phase II of the South County Bike Path, the Bike Providence Route, various projects under the Recreational Trails Program, and a statewide signing and striping program to expand bike routes and possibly bike lanes along compatible state highways.

## BIKE/PEDESTRIAN PROGRAM TABLES

## BRIDGE IMPROVEMENT PROGRAM

This TIP continues a program of critically-needed bridge repairs and/or replacements to insure that these critical links in the transportation infrastructure remain safe and serviceable. Bridge projects originate from state assessments and community requests which are evaluated and prioritized through RIDOT's bridge management program. All bridge-related requests from communities and the public received through the TIP solicitation process were referred to RIDOT for evaluation and possible inclusion in the program.

Included as part of the Bridge Program are funds for design, right-of-way acquisition, bridge instrumentation, preventive maintenance activities, and the bridge inspection program. RIDOT maintains discretion on how bridge funds are applied to projects, and thus the listing of projects shown is subject to change should an unanticipated need develop.

Work in support of the Freight Rail Improvement Program (FRIP) has been part of the Bridge Program in prior TIPs. Since it is not clear whether additional bridge funds will be necessary for FRIP completion, no line item for the FRIP work is included in the Bridge Program. As the project approaches the final stages and the final project budget is determined, additional FHWA funding that may be required for the project may come from the Bridge Program in this TIP. The FRIP was made eligible for FHWA funds in the National Highway Systems Bill.

Due to the high cost, funding for the replacement of the Washington Bridge has not been included as part of the bridge program and instead is shown under the Major Projects with Multi-year Funding category.

## BRIDGE IMPROVEMENT PROGRAM TABLES

## CONGESTION MITIGATION/AIR QUALITY PROGRAM

The Congestion Mitigation and Air Quality Improvement (CMAQ) Program is an innovative program established by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), and continued under TEA 21. Funds are allocated to states having areas classified under the Clean Air Act as being in non-attainment of national air quality standards. states may use funding for transportation control measures (TCMs) and programs designed to help implement State transportation/air quality plans and attain the national standards for carbon monoxide, ozone and, in some cases, small particulate matter.

CMAQ funding is focused on investment in air quality improvements; it provides funds for projects that expand or initiate transportation services with air quality benefits. The ISTEA created flexible guidelines that allow the CMAQ Program to cut across traditional boundaries and encompass projects and programs dealing with highways, transit, and non-traditional areas, such as vehicle emission inspection and maintenance to name just a few.

For this TIP, proposals for new CMAQ projects were received as part of the general TIP project solicitation process. The State Planning Council's Air Quality/Transportation Subcommittee, in conjunction with RIDOT, evaluated the eleven CMAQ proposal submissions that requested a total of \$ 23.6 million. The recommended CMAQ program was submitted to the TAC in April 2002 and included fifteen projects for continuation/completion from the 2001-2002 TIP plus two new projects, High Efficiency Diesel Bus Emission Control and Seasonal Ferry Service from Providence to Newport.

The seventeen projects in the CMAQ Program are expected to eliminate an estimated total of 150 kilograms of Volatile Organic Compounds (VOC) and 132 kilograms of Nitrogen Oxides (NOx), during a typical ozone day. VOC and NOx, which mix with sunlight to form Ozone, are considered the primary pollutants of concern for the emissions analysis.

## CONGESTION MITIGATION/AIR QUALITY PROGRAM TABLES

## ENHANCEMENT PROGRAM

In the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA), Congress established the Enhancement Program. Funds set aside from the Surface Transportation Program (STP) would be committed to projects that would address the environmental impacts on local communities from transportation and highway construction. TEA-21 continued the Program, requiring that 10 percent of STP funds be set-aside and used exclusively for enhancement activities and projects that will increase mobility, protect the human and natural environment, and preserve and increase the livability of communities.

Projects must have a relationship to transportation and fall within at least one of the following Transportation Enhancement categories:

- 1) Bicycle & Pedestrian Facilities;
- 2) Safety & Educational Activities for Pedestrian & Bicyclists;
- 3) Acquisition of Scenic Easements & Scenic or Historic Sites;
- 4) Scenic or Historic Highway Programs, including Tourist and Welcome Center Activities;
- 5) Landscape and Scenic Beautification;
- 6) Historic Preservation;
- 7) Rehabilitation and Operation of Historic Transportation Buildings, Structures, or Facilities;
- 8) Preservation of Abandoned Railway Corridors;
- 9) Control & Removal of Outdoor Advertising;
- 10) Archaeological Planning & Research;
- 11) Environmental Mitigation to Address Water Pollution due to Highway Runoff or to reduce Vehicle Wildlife Mortality while maintaining Habitat Connectivity; and
- 12) Establish Transportation Museums.

The projects included in the Enhancement Program for this TIP were selected and recommended by the RIDOT's Transportation Enhancement Advisory Committee, which conducted an exhaustive solicitation, outreach, and proposal evaluation process during late 2001 and early 2002. A total of 74 projects, out of a total pool of 147 applications, were recommended for funding, in addition to the on-going program (carried forward from previous TIPs). The program of new and continuing projects totals \$40.5 million, with \$14.5 million allocated for FY 2003 and 2004.

All enhancement projects listed in the TIP will be initiated through the development of a project agreement with the sponsor and/or the commencing of the design process in 2003-2004. The funds to be allocated for each project as well as the year of anticipated implementation is shown in the following table. The implementation schedule is based on the information available to RIDOT and is subject to change. To expedite program implementation, RIDOT is given flexibility in advancing projects within the annual Enhancement budget when other projects are delayed.



## ENHANCEMENT PROGRAM TABLES

## HIGHWAY PROGRAM

The TIP's Highway Program includes funding for construction projects as well as project-related design and right-of way acquisition. A majority of the highway construction projects (and the majority of funds) are devoted to projects which preserve and manage the existing system, without appreciable expansion of highway capacity. Design and Right-of-Way costs for projects programmed for construction are included as a line item in the TIP. This is done because it is very difficult to predict accurately the design and right-of-way costs for individual projects. The programmatic needs for those phases are much easier to track and predict. These line items only authorize funding for Design and Right of Way activities for those projects specifically listed in the Highway Program within the six years for construction.

### *Continuing Construction Projects*

The FY 2003-2004 TIP program provides for completion of highway construction projects which were programmed for construction by the previous TIP, but were delayed or not initiated due to complexities or issues that developed. Examples are: Route 1/Mooresfield Road Intersection, Route 3 Reconstruction, Route 6 Improvements, Route 146/Route 116 Interchange, Mowry Road and Providence Downtown Circulation Improvements.

### *Newly-Programmed Construction Projects*

A limited number of highway reconstruction projects were recommended by the TAC to move from Study & Development to the design /construction phase. Examples include: Route 1 Median Closures, Route 4/Route 1 Median Turnaround and Ramp, Dean/Cahir/Stewart Street Improvements, East Main Road, and Route 5.

*ADA Program*

Efforts to improve the compliance of Rhode Island's roadways pursuant to the Americans With Disabilities Act (ADA) are on-going. When roadwork of any nature is undertaken, the implementing agency must also bring roadways and walkways into compliance with the Americans with Disabilities Act standards. This may require the addition of wheelchair ramps and the relocation of utilities for example. The cost of this work is included in the cost of the projects listed in the TIP. There are places where handicap accessibility along State roadways is necessary and the work can't wait for the roadwork to be programmed. The ADA line item in the TIP represents localized projects designed to make spot areas accessible, independent of roadwork. RIDOT works with the Governor's Commission on Disabilities to identify areas where ADA improvements are most needed. Funding for this program is approximately \$ 1 million per year. Projects that have been given a high priority as a result of this process and are expected to be implemented in FY 2003-2004 under this program include:

- Willett Avenue (Bullocks Point Avenue to Washington Road) – East Providence/Barrington
- Pawtucket Avenue (Veterans Memorial Parkway to Bullocks Point Avenue) – East Providence
- Mineral Spring Avenue (Hawthorne Street to Sunset Street) – North Providence
- West Shore Road (Conimicut Business District) – Warwick
- South Main Street (Business District) – Providence
- Route 2 (West Natick Road to East Avenue) – Warwick
- Route 2 (Route 112 to Old Mill Lane) – Narragansett Indian Reservation/Charlestown
- Park Avenue (Aquidneck Avenue to Point Road) – Portsmouth

Additionally, the following requests for work on existing sidewalks were received from communities through the TIP proposal solicitation process. These will also be considered by RIDOT and the Governor's Commission on Disabilities for possible future construction:

- New London Avenue (Warfield Avenue to West Warwick line) – Cranston
- Water Street (Old Harbor to Dodge Street) – New Shoreham
- Woonasquatucket Avenue (Smith Street to Providence line) – North Providence
- Mineral Spring Avenue (Smith Street to Cooper Street) - North Providence
- Mineral Spring Avenue (Charles Street to Pawtucket line) - North Providence
- Daggett Avenue (Armistice Blvd. To Central Avenue) – Pawtucket

New sidewalk proposals were submitted by communities as part of the general TIP project solicitation. There currently is no program in the TIP for this type of project. Using these projects as a basis, RIDOT will do an in-house evaluation and make a recommendation to the TAC on the type of program and the level of resources that would be required to be able to accommodate new sidewalk requests. The locations that were requested include: Knotty Oak and Main Street/Coventry, Phenix Avenue/Cranston, Division Street/East Greenwich, Woodruff Avenue/Narragansett, Route 108/Narragansett, Route 102/North Kingstown, Mineral Spring Avenue/North Providence, Slatersville Sidewalk Reconstruction and Extension/North Smithfield, Earl Street Footbridge/Providence, and Rockland Road/Scituate.

### *Stormwater Retrofit Program*

RIDOT has utilized a stakeholders group to prioritize the Stormwater Retrofit Abatement selection process. This stakeholders group includes the Rhode Island Department of Environmental Management, Federal Environmental Protection Agency, Save The Bay, community representatives from Cranston, Warwick, and West Warwick as well as representatives from the Pawtuxet River Authority. It was mutually agreed that RIDOT would proceed with the design and construction of five outfalls on the Pawtuxet River as a first priority. To date, one contract addressing three outfalls has been designed and is presently under construction. The other two outfalls on the Pawtuxet River are presently under design and will go out to bid for construction in FY 2003. A Design Study Report for the remaining fifteen outfalls from the original University of Rhode Island study has been prepared. This report will be shared with the stakeholders in order to decide the priority of the next five outfalls for which design efforts will begin.

RIDOT will continue to advance stormwater abatement components that are prioritized by the stakeholders. Future elements for incorporation into DOT's program will include recommendations from federally approved Total Maximum Daily Load (TMDL) studies that are prioritized by the stakeholders group. The Department will procure additional consultant services through an RFP process during FY 2003. These consultant services should be in place to begin design efforts on additional stormwater projects beginning in FY 2004.

## HIGHWAY PROGRAM TABLES

## INTERSTATE PROGRAM

Rhode Island's emphasis on system preservation has yielded a dramatic improvement in the riding surface on most of its Interstate System mileage in the last few years. In 1994, the condition of the Interstate riding surface was as follows: 38.6 percent was in poor condition, 31.4 percent was in fair condition, 30 percent was in good condition. No portion was in excellent condition. By 2001, the condition had dramatically improved, with zero percent in poor condition, 0.6 percent in fair condition, 1.8 percent in good condition and 97.6 percent in excellent condition. This progress notwithstanding, maintaining the interstate and bridges with anticipated funding remains a daunting task.

The \$15 million allocated per year for the Interstate Program approximates the Interstate Maintenance funds provided under the TEA-21 formula to Rhode Island (together with State matching funds). Although this funding is substantial, it will be insufficient to fund all the needed work, with an estimated \$ 100 million in bridge work required on just the Interstate alone. Projects in the Interstate Program are determined by RIDOT's prioritization. Projects to be implemented under the Interstate Program during the first two years of this TIP include: I-95 Riding Surface and Ramps (Orms Street Bridge No. 702 to Industrial Drive Bridge No. 709), I-95 Service Roads (Pawtucket Bridges Nos. 547, 548, and 549; Garden Street, Pine Street and George Street), I-95 Signage (Exits 1-8, 16, 17 and 18), I-295 Safety and Bridge (south of Rt. 7 to the Blackstone River), and I-195 Broadway Bridge No. 470 and Warren Avenue Bridge No. 473. Funding has also been included for design-related work for Interstate projects.

## INTERSTATE PROGRAM TABLES

## MAJOR PROJECTS

This TIP includes a continuation of funding commitments for two major, multi-year projects---the Quonset Access Road and the Relocation of I-195 in Providence. Substantial investments have occurred in the planning, design, permitting, and land acquisition phases of these projects and their construction will be well underway during the FY 2003-2008 TIP. A new project, replacement of the eastbound Washington Bridge will begin in FY 2004.



## MAJOR PROJECTS TABLES

## PAVEMENT MANAGEMENT PROGRAM

The Pavement Management Program includes the resurfacing of roadways but also allows the State (RIDOT) to pursue pavement treatment options such as crack sealing and micro-surfacing when such treatment is appropriate. This work must be undertaken as part of a federal pavement management program in order for these needed preventive maintenance activities to be undertaken. Roadways listed in the Pavement Management Program included community - requested projects which were referred by the TAC, and from RIDOT's Pavement Management Program priorities. Inclusion in the Program does not, however, guarantee that all projects can be accomplished within the two-year timeframe of the TIP's biennial element. Funding for the Program continues at the same level as the previous TIP at \$20 million per year.

The listing of pavement management projects is separated into two categories. The first group, Projects for Implementation, lists projects with an anticipated year of construction. A majority of these projects were carried forward from the previous TIP and are anticipated to be completed during the first two years of this TIP. The second group, Proposed Roads for RIDOT Evaluation, are requests that were made by communities as part of the project solicitation process for this TIP. These roadways must be evaluated by RIDOT to determine if resurfacing is necessary and what type of treatment is appropriate.

RIDOT's evaluation procedure for candidate roadways for the Pavement Management Program (provided that those roadways have not been worked on in the past 15 years), is based upon four sources of information:

1. Pavement Management System Data
2. Public input - priority assigned by community
3. Maintenance Division input
4. Staff field review--roadways are driven and visually evaluated on a scale from 0-5 (best to worst) for the following: condition of road surface, sidewalk, curbing, utility covers, drainage, rideability.

Roadways with the worst ratings are candidates for resurfacing. Final selection considers traffic volumes and the distribution of projects statewide, to insure an equitable geographic distribution. Roadways selected must be eligible for federal funding (e.g., be functionally classified). State roads are given priority, but local roads may also be included in the program, based on factors such as regional significance or the road, or support for an economic development or enterprise zone initiative, etc. RIDOT determines the prioritization and scheduling for all Pavement Management projects and may vary the plan and schedule from that listed on the following table.

## PAVEMENT MANAGEMENT PROGRAM

## PLANNING

Transportation planning occurs through the efforts of the Statewide Planning Program (statewide MPO), RIDOT, and RIPTA (statewide transit operator), in accordance with a Unified Work Program for Transportation Planning, which must be approved each year by the State Planning Council, and the federal agencies that fund transportation planning. Planning involves long range planning, the development of the TIP, environmental analysis and data collection efforts to support the highway program, among other activities. A new initiative which will begin in this TIP will be the development of three corridor plans for different areas of the state. Funding for planning activities continues at the same levels as the FY 2001-2002 TIP. (Note: Additional funding for transportation planning is also shown under the Transit Program.)

## PLANNING TABLES

## STUDY & DEVELOPMENT PROGRAM

This category of the TIP allows high-ranking candidate projects to be assessed, fully scoped and developed with community input, and to emerge with sound cost estimates ready for the design/construction phase. This category is intended to bring projects to no more than 30% design status. Placement in the Study & Development Program does not guarantee that a proposal will be implemented as requested; but does assure that the transportation problems it proposes to resolve will be examined. To insure that unfulfilled expectations are not created, the Study & Development category is limited to a number of projects that can reasonably be expected to be looked at during the biennial period. Since the Study & Development Program now serves as the "entry portal to the TIP", competition for this category is keen. In this TIP cycle only slightly over 20 percent of new requests could be accommodated.

The TAC voted in May 2002 to establish a standing subcommittee to monitor the Study and Development program. RIDOT has agreed to work with the subcommittee and provide status reports every 4-6 months. The subcommittee will develop a methodology to prioritize the projects within the program, as well as make recommendations on projects that have reached 30% design. Also of concern is coordination between DOT and cities and towns who undertake design at their own expense.

## STUDY & DEVELOPMENT PROGRAM TABLES

## TRAFFIC/SAFETY

Perhaps the most important aspect of highway travel is safety. While roadways today are physically safer and more forgiving of error than those of past eras, there are still too many accidents, injuries, and fatalities. Increased traffic volumes, increased speed, reckless vehicle operation -- including the disturbing phenomena called "road rage", and substance-impaired drivers are factors not related to the physical/design parameters of a highway that frequently result in accidents. But opportunities remain for incorporation of additional safety features into some highway segments and intersections to improve safety and (to the extent possible) compensate for human error or reckless behavior. In addition, damaged safety equipment must be repaired or replaced, or the resulting loss in the margin of safety can contribute to or worsen, the consequences of an accident. The Traffic/Safety Program funds many highway safety activities which may go unnoticed but have a major impact on motorist safety.

Pedestrian safety is a growing concern as increasing numbers of Rhode Islander's take to foot. To address pedestrian needs, features that accommodate and encourage safe pedestrian travel will be included in projects under the hazard elimination line item.

Other activities that were begun in the previous TIP, such as highway lighting improvements, the installation of roadside weather stations and the repair of isolated drainage problems will continue. A new activity listed as homeland security has been added and will include various activities to improve the security of transportation facilities such as barrier placement, surveillance and the purchase of specialized equipment.

This TIP continues the Traffic/Safety Program at the same funding level as the previous TIP. Additional activities and projects to be supported through this program include: traffic signal repair and construction, signing, striping, repair of damaged safety devices, traffic monitoring, modifications to arterial highways to improve traffic flow and reduce congestion, and traffic/safety design-related work. RIDOT maintains discretion in the Traffic/Safety Program to select and prioritize projects under each of the listed activities.



## TRAFFIC/SAFETY TABLES

## TRANSIT PROGRAM

The TIP includes the following Transit projects, over the next six years:

### *Bus Replacement*

RIPTA has programmed \$2.28 million in FFY 2003 and \$1.46 million in FFY 2004 for the replacement of a total of 13 buses in the 1988 and 1990 fleets. A total of \$1.3 million in CMAQ funding is programmed for bus replacement in these years. Additional bus replacement activities will take place as discretionary funds are made available. RIPTA has programmed \$5 million annually in anticipated discretionary funding in the Statewide Bus and Bus Facilities category.

### *Bus Rehabilitation*

\$1.5 million is programmed in FY 2004 for upgrade of the HVAC systems for the 46 buses in the rehabbed fleet of 1992 vehicles.

### *Statewide Bus and Bus Facilities*

This category represents anticipated discretionary funding received for capital projects. Activities may include projects associated with bus replacement, fleet expansion, facilities, and intelligent transportation systems (ITS) implementation. Five million dollars is programmed in each year of the TIP.

### *Capital Equipment and Supplies*

Purchases in this category will benefit RIPTA administration and operations. The following purchases will be made over a six-year period: office equipment (\$300,000); computer equipment (\$9.75 million); capital tools and supplies (\$1.5 million); and intelligent transportation systems (\$3.59 million).

*Office Equipment:* to fund routine purchases/leases and replacements of equipment necessary for RIPTA administration. Examples include copy machines, fax machines, etc. During the active TIP years RIPTA has programmed \$100,000.

*Computer Equipment:* to fund routine replacements and upgrades of computer hardware and software used for planning, administration and operations functions. RIPTA has programmed \$1.75 million in FY 2003-2004.

*Capital Tools and Supplies:* to fund the purchase of equipment and tools to meet RIPTA needs to perform maintenance and upkeep of the Authority's capital property. RIPTA has programmed \$ 500,000 for FY 2003-2004.

*Intelligent Transportation Systems:* \$3.6 million is programmed in FY 2006-2008 for vehicle location systems for the remainder of RIPTA's fleet and associated enhancement of management capabilities. Between FY 2003 and FY 2005, RIPTA will seek alternate sources of funding for earlier implementation of ITS activities.

#### *Paratransit/Flexible Services Program*

This activity will fund the purchase of vehicles for the RIdE program and RIPTA's Flex Service. The TIP programs \$11 million over six years for the purchase of 154 vehicles. The TIP programs funding for 24 vehicles in FY 2003 and 18 vehicles in FY 2004 for \$2.81 million.

#### *Rural Operating Assistance, RTAP*

Funds programmed in this category provide operating assistance for transit services in rural areas of the state and for technical assistance and training activities associated with Rhode Island's Rural Transportation Assistance Program. \$950,000 is programmed in each year of the TIP.

### Land and Buildings

*Paratransit Infrastructure:* to fund the purchase of maintenance equipment associated with RIPTA's performance of centralized maintenance activities for all RIdE program vehicles. This equipment will have the capacity to be reinstalled in its ultimate location on the RIPTA property following completion of Phase III of Elmwood Avenue facility renovations.

*Park-n-ride Lots:* to fund construction of amenities at park-n-ride lots served by RIPTA. This will include new shelters and other conveniences and attractions for commuters. \$130,000 has been programmed for this activity in FY 2004.

*Tunnel Renovations/Traffic Alternatives:* \$1.5 million is programmed in FY 2007 for safety improvements at RIPTA's East Side bus tunnel in Providence.

*RIPTA Properties Security Enhancements:* to fund implementation of a security plan for the Elmwood facility developed during planning for the new maintenance facility. The new security system will employ swipe-card technology to control access to RIPTA buildings. \$500,000 is programmed in FY 2003.

*RIPTA Facilities Renovations:* \$500,000 is programmed in FY 2003 for renovations at 265 Melrose Street including measures to enhance ADA compliance.

*Storage/Administration/Paratransit:* RIPTA has programmed \$9.7 million in the active years of the TIP for Phase III of planned improvements to its Elmwood facility. This project will entail construction of a facility for centralized maintenance of RIde program vehicles, vehicle storage, and RIde administration.

*Transit Hubs:* to fund the construction of regional transit hubs throughout the state. These sites will be used for transfers between fixed routes and service integration sites between paratransit or demand response service vehicles and fixed routes. Funding in the amount of \$1.2 million has been identified in the transit program between FY 2005 and 2008. Additional funding, in the amount of \$400,000, is programmed in the CMAQ program in the active years of the TIP.

#### *Other Vehicles*

\$1.3 million is programmed between FY 2004 and FY 2006 for the purchase of 36 non-revenue support vehicles, including road service trucks and supervisory vehicles.

#### *Preventive Maintenance*

RIPTA plans to use capital funding for maintenance operations. The conversion of capital dollars to operating subsidy for preventive maintenance activities is allowed in TEA 21 as a means to offset the loss of general federal operating assistance. Growing constraints on RIPTA's operating budget has made it necessary for RIPTA to program funds in this category on an ongoing basis. RIPTA will program \$32.4 million in federal capital funding to reduce deficit operations over the next 6 years. In FY 2003-2004, a total of \$ 12.4 million is programmed.

#### *Enhanced Passenger Information*

100,000 is programmed in FY 2003 for redesign and reprinting of RIPTA's system map and posted public information. The redesign will include changes to the configuration of Kennedy Plaza, recent changes to routes, and the addition of Flex Service zones.

### *Associated Capital Maintenance*

Certain spare parts are considered an eligible capital expense if they meet the federal definition of associated capital maintenance items. These items cost at least one-half of one percent of the current fair market value of the rolling stock on which the item is to be used. Associated capital maintenance items include tires, tubes, and repair or rebuild kits, engines, transmissions, generators, axle assemblies or compressors. The TIP programs a total of \$2.13 million in FY 2003 and FY 2004.

### *Jobs Access/Reverse Commute*

RIPTA has received competitively-awarded and discretionary funding from FTA's Jobs Access Reverse Commute (JARC) program since FY 1999. This funding is utilized to operate fixed-route and demand-response transit services intended to overcome transportation barriers to employment. Services are designed in partnership with social and human service agencies, and in particular with the RI Department of Human Services. RIPTA has programmed funding in the amount of \$2 million from this program in each year of the TIP.

### *Planning*

RIPTA has programmed \$340,000 in FY 2003 and \$650,000 in FY 2004 to support planning activities. In FY 2003, \$120,000 is programmed to support the completion of RIPTA's bus stop inventory. The bus stop inventory is a fundamental data management tool which will support geographic information systems (GIS), automated passenger counting (APC), and automatic vehicle location (AVL) deployment. These technologies in turn support advanced planning, operations, maintenance, and marketing functions.

### *5307 1% Enhancements*

Transit providers receiving assistance under the FTA's urbanized area formula program (5307 funding) are required to dedicate 1% of total funding to "transit enhancement" projects or activities. In FY 2003 \$160,000 is programmed to support transit service to parks, and in the remaining years of the TIP approximately the same amount is programmed for park and ride lot enhancements.

*Warwick Train Station*

TEA-21 authorized \$25 million for the development of an Amtrak/commuter rail station and automated people mover connection from the Northeast Corridor to T.F. Green Airport in Warwick, RI. In an effort to reduce traffic congestion in the airport area, a public/private partnership with the RI Airport Corporation (RIAC) and the rental car agencies has been established to develop a multimodal consolidated rental car facility. The facility will centralize all existing and future ground transportation services, including Amtrak Acela, commuter rail, RIPTA and intercity bus, and rental cars into one 3500 space parking facility; and will be connected to T.F. Green Airport by a 1300 foot automated people mover system. The project, currently at the 65% design stage, will be transferred to RIAC for construction and operations.

The current cost estimate for the project is \$168 million. Funding for the project will come from a combination of sources including a charge assessed on rental car customers. The financing plan is still being developed.

## FEDERAL TRANSIT PROGRAM TABLES

## **AIRPORT IMPROVEMENT PROGRAM**

The Capital Improvement Program of the Rhode Island Airport Corporation is included in the TIP for informational purposes.



AIRPORT IMPROVEMENT PROGRAM

## **INDIAN RESERVATION ROADS**

The Indian Reservation Road Program is included in the TIP for informational purposes.

## Appendix A

## Appendix B

## Appendix C

## Appendix D